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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KIM, YOUNG J

ART UNIT PAPER NUMBER

1637

DATE MAILED: 09/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/816,787	FERMIER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Young J. Kim	1637	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 18, 19, 22-31 and 34 is/are rejected.
- 7) ☒ Claim(s) 16, 17, 20, 21, 32, 33 and 35-37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### ***Drawings***

New corrected drawings are required in this application because Figure 2 of the instant application appears to be hand-drawn, making it difficult to read the annotations made therein as well as Figures 6 and 7, wherein the menus of the user interface is not clearly visible. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. **The requirement for corrected drawings will not be held in abeyance.**

### ***Information Disclosure Statement***

Applicants are advised that the reference #26, Yoshioka et al., cited in the IDS received on June 25, 2001, is illegible. Therefore, the reference has not been considered. Applicants are encouraged to send a legible copy of the reference in their response to the present Office Action.

Applicants are also advised that the French patent, FR 2 633 310, cited in the IDS received on February 5, 2003 has been considered only to the extent of its translated Abstract.

### ***Claim Objections***

Claim 24 is objected to because of the following informalities: A claim which depends from a dependent claim should not be separated from that dependent claim by any claim which

does not also depend from the dependent claim (see MPEP 608.01(n), at 600-63; *Claim Form and Arrangement*).

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14, 15, 27, 28, and 34 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "the temperature control device." There is insufficient antecedent basis for this limitation in the claim. For the purpose of prosecution, claim 14 is assumed to be dependent on claim 13, which establishes a proper antecedent basis.

Claim 15 recites the limitation "the temperature monitoring device." There is insufficient antecedent basis for this limitation in the claim. For the purpose of prosecution, claim 14 is assumed to be dependent on claim 13, which establishes a proper antecedent basis.

Claim 27 is indefinite for the recitation of the terms, "reaction data" and "generate a single data point." The recitation of "reaction data" is indefinite because it is unclear what kind of data is embraced by the term, rendering the metes and bounds of the claim indefinite. The recitation of "generate a single data point" is indefinite because it is unclear what kind of data the "single data point" is to represent as well as where the data point is displayed.

Claim 28 is indefinite for missing a conjunction in the description of the apparatus. Specifically, the apparatus is described as having three items: a) a plurality of reaction blocks; b)

a robotic device; **and** c) a controller. Because the conjunction is missing after the recitation of item b), it becomes indefinite what metes and bounds are embraced by the apparatus.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 11-15, 18, 19, 22, 23, 26, 28, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Danssaert et al. (U.S. Patent No. 5,525,300, issued June 11, 1996).

Danssaert et al. disclose an apparatus comprising the below components and a method of its use (claims 1, 2, 18, 19, 26, 28):

a) a plurality of reaction blocks (Figure 1, components 3, 17, 18, and 19) wherein at least one of the blocks is a hot reaction block and at least one of blocks is a cold reaction block (Figure 3), wherein a reaction vessel (Figure 1, component 20) has a plurality of openings formed therein;

b) a robotic arm which transfers the reaction vessel from one hot reaction block to one cold reaction block (Figure 1; column 1, lines 29-35; column 4, lines 35-42; column 5, lines 42-45); and

c) a controller having a user interface for inputting temperature and sampling interval, the controller in communication with the blocks and robotic device (column 5, lines 25-42).

The heating and cooling device of Danssaert et al. is associated with a heating and cooling device (Figure 3; claim limitation 3 and 4).

The controller allows a user to set up predetermined temperature conditions as well as the time in which the temperature is to be kept (column 5, lines 34-41; claim limitation 5-6 and 12).

The robotic arm disclosed by Danssaert et al. is disclosed as being able to move up, down, and in circular motion (thus 3-D range of movement; claim limitation 7-8 and 11).

Figure 3 demonstrates that the reaction blocks associated with the heater/cooler are monitored via temperature sensor which communicates with the controlling electronics which control the temperatures (claim limitation 13, 22, 23, and 31).

The nature of temperature control device (claim limitation 14 and 15) of the apparatus disclosed by Danssaert et al. is not explicit. However, it is determined that the temperature control device governing that of Danssaert et al. anticipates the invention because the same outcome results in the disclosed apparatus (i.e., monitoring temperature control device). According to *In re Best* 195 USPQ 430, 1997, the court stated that, "Patent Office can require applicant to prove that prior art products do not necessarily or inherently possess characteristics of his claimed product wherein claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicant" (pp. 430).

As pointed out in *In re Mott*, 190 U.S.P.Q. 536 (CCPA 1975), "Claims must be given broadest reasonable construction their language will permit in ex parte prosecution, and applicant who uses broad language runs the risk that others may be able to support the same claim with a different disclosure." Therefore, although the invention appears to be drawn to an automated

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apparatus/method which involves the generation of isothermal/nonisothermal temperature profiles to generate a temperature vs. time graph for the purpose of monitoring stability/degradation of a test compound (page 8, specification), based a broadest reasonable interpretation of the claims, the present art rejection is applied.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 10, 24, 25, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danssaert et al. (U.S. Patent No. 5,525,300, issued June 11, 1996) in view of Burrow et al. (US 2002/0090320 A1, published July 11, 2002, priority October 13, 2000).

Danssaert et al. disclose an apparatus comprising the below components and a method of its use:

a) a plurality of reaction blocks (Figure 1, components 3, 17, 18, and 19) wherein at least one of the blocks is a hot reaction block and at least one of blocks is a cold reaction block (Figure 3), wherein a reaction vessel (Figure 1, component 20) has a plurality of openings formed therein;

b) a robotic arm which transfers the reaction vessel from one hot reaction block to one cold reaction block (Figure 1; column 1, lines 29-35; column 4, lines 35-42; column 5, lines 42-45); and

c) a controller having a user interface for inputting temperature and sampling interval, the controller in communication with the blocks and robotic device (column 5, lines 25-42).

The heating and cooling device of Danssaert et al. is associated with a heating and cooling device (Figure 3).

The controller allows a user to set up predetermined temperature conditions as well as the time in which the temperature is to be kept (column 5, lines 34-41).

The robotic arm disclosed by Danssaert et al. is disclosed as being able to move up, down, and in circular motion (thus 3-D range of movement).

Figure 3 demonstrates that the reaction blocks associated with the heater/cooler are monitored via temperature sensor which communicates with the controlling electronics which control the temperatures.

The nature of temperature control device of the apparatus disclosed by Danssaert et al. is not explicit. However, it is determined that the temperature control device governing that of Danssaert et al. anticipates the invention because the same outcome results in the disclosed apparatus (i.e., monitoring temperature control device). According to *In re Best* 195 USPQ 430, 1997, the court stated that, "Patent Office can require applicant to prove that prior art products do not necessarily or inherently possess characteristics of his claimed product wherein claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicant" (pp. 430).

The robotic arm disclosed by Danssaert et al. does not employ a finger grip mechanism.

Burrows et al. disclose a well-known robotic grip technology in transferring samples.



It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Danssaert et al. with that of Burrow et al. in order to arrive at the claimed invention. One of ordinary skill in the art would have been motivated to substitute the robotic arm of Danssaert et al. with a robotic arm which involves a grip mechanism, a technology well-known in the art of automation, as demonstrated by Burrows et al. with a reasonable expectation of success.

### ***Conclusion***

Claims 1-15, 18, 19, 22-31, and 34 stand rejected.

Claims 16, 17, 20, 21, 32, 33, and 35-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims.

The prior art does not teach or reasonably suggest an automated apparatus/method which involves the generation of isothermal/nonisothermal temperature profiles which is employed to generate a temperature vs. time graph for the purpose of monitoring stability/degradation of a test compound (page 8, specification).

### ***Inquiries***

**Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Young J. Kim whose telephone number is (703) 308-9348. The Examiner can normally be reached from 8:30 a.m. to 7:00 p.m. Monday through Thursday. If attempts to reach the Examiner by telephone are unsuccessful, the Primary Examiner in charge of the prosecution, Dr. Kenneth Horlick, can be reached at (703)-308-3905. If the attempts to reach the above Examiners are unsuccessful, the Examiner's supervisor, Gary Benzion, can be reached at (703) 308-1119. Papers related to this application may be submitted to Art Unit 1637 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1156 OG 61**

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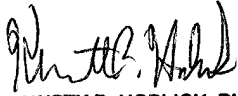
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(November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 CFR 1.6(d)). **NOTE: If applicant does submit a paper by FAX, the original copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED, so as to avoid the processing of duplicate papers in the Office. All official documents must be sent to the Official Tech Center Fax number: (703) 872-9306. For Unofficial documents, faxes can be sent directly to the Examiner at (703) 746-3172. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.**

Young J. Kim

9/5/03

  
KENNETH R. HORLICK, PH.D  
PRIMARY EXAMINER

9/8/03